# **Tools for Encouraging Pollution Prevention and Recycling**

#### Introduction

When the U.S. Environmental Protection Agency (EPA) was created in the early 1970's its focus was on cleaning up and controlling the most immediate environmental problems. Over the next twenty years, the nation made huge investments in these efforts and realized major reductions in air, water, and land pollution. However, it became increasingly apparent over time that the traditional "end-of-the-pipe" approaches are expensive (increasingly so), not fully effective, and sometimes transfer pollution between environmental media.

To achieve needed additional improvements to environmental quality, conservation activities must move upstream to prevent pollution before it occurs, and waste must be recycled wherever possible. The Pollution Prevention Act of 1990 recognized that pollution should be prevented or reduced at the source whenever feasible. The U.S. EPA defines pollution prevention as "source reduction," a term that is defined in the Pollution Prevention Act. EPA also emphasizes protecting natural resources through conservation and increased efficiency.

Pollution prevention is not the only strategy for reducing environmental risks, but it is the preferred one, followed by recycling. This priority is reflected in the U.S. EPA's environmental management hierarchy which includes:

- 1) pollution prevention,
- 2) recycling,
- 3) treatment, and
- 4) disposal or release.

Preventing pollution offers important economic benefits, as pollution never created does not need to be managed or cleaned up. Recycling means that wastes do not have to be disposed of and raw materials can be conserved. Pollution prevention and recycling have the potential to protect the environment and improve manufacturing efficiency by reducing the use of raw materials.

This section evaluates financing tools which states, communities, and the private sector can use to encourage pollution prevention and recycling. A number of different ways of raising revenues, lowering costs, and influencing behavior are discussed. The tools range from traditional state and federal assistance programs to bold new financial management and investment strategies, programs, and techniques.

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# **Assurance and Performance Bonding**

**Description:** Mine owners and/or other developers are frequently required under state and federal laws to purchase assurance or performance bonds that cover potential environmental remediation expenses resulting from their projects. These bonds are repaid to the developers at the time of maturity if the potential damage has not occurred. The bonds are repaid in part if a level of damage below a specified baseline has occurred. The bonds are forfeited if worst-case damages are incurred. In the case that damages occur, these bonds are used to remedy the environmental damages or to compensate injured parties. Assurance and/or performance bonding is required in many states to assure that surface mined areas will be reclaimed and remediated. Also, bonds for site reclamation for coal mines are required under the Surface Coal Mining and Reclamation Act of 1977.

**Reference for Further Information:** Boyd, James, "Financial Responsibility for Environmental Obligations: Are Bonding and Assurance Rules Fulfilling their Promise?" *Research in Law and Economics*, issue 20, pp. 417-486: 2002.

Boyd, James, "Bonding Requirements for Coal and Hardrock Mines in the U.S." *International and Comparative Mineral Law and Policy: Trends and Prospects*, Bastida, E.; Walde, T.; and Warden, J; editors; New York, Kluwer: 2005. For citations of more of James Boyd's publications, see the Resources for the Future Website at <a href="http://www.rff.org/Boyd.cfm#journal">http://www.rff.org/Boyd.cfm#journal</a>.

## **Demand-Side Management Pricing**

**Description**: Demand-Side Management Pricing, also called Peak Load Pricing, Demand-Responsive Pricing, and Critical Peak Pricing, is a unit pricing structure that is sensitive to the timing of usage (demand) during a utility system's peak hours or peak days. Usage that occurs during these peak periods is charged at a higher rate. Utilities must incur additional capital and operating costs to develop the capacity to meet peak demands. Through demand-side management pricing, these additional costs can be shifted to customers. Such pricing also tends to reduce peak demand by causing system users to reduce their use of the system or at least shift some portion of their usage to non-peak periods. As a result, the utility can "shave" operating costs and stretch existing investment, or reduce future investment in facilities necessary to meet peak period demands. The demand-side management pricing structure is most commonly used by electrical, gas, and communications utilities, and less frequently by water or sewer utilities.

**Reference for Further Information:** Electric Utility Consultants, Inc. Website: <a href="http://www.euci.com/web\_conferences/0406-advanced-metering.php">http://www.euci.com/web\_conferences/0406-advanced-metering.php</a>. See "Variable Electric Pricing on Tap?: PUC to Consider System that Charges Users More During Peak Midday Hours," by Tribble, Sarah Jane, San Jose Mercury News (CA), p. 1C at: <a href="http://www.siliconvalley.com/mld/siliconvalley/14665066.htm">http://www.siliconvalley.com/mld/siliconvalley/14665066.htm</a>.

#### **Deposit-Refund Systems**

**Description:** Deposit-refund systems combine a deposit on a substance or product, paid at the time of purchase, with a refund payable to the consumer when product packaging, or the substance or product itself, is turned in for recycling or proper disposal. Historically, deposit-refund systems have been applied at the state level to glass and aluminum bottles and cans. Deposit-refund systems are now being expanded to include other types of products. For example, in some areas they are being applied to office products, such as photocopy machine toner cartridges. The states of Maine and Arkansas are among many states that have established deposit-refund systems to encourage the recycling of lead-acid/automobile batteries.

Reference for Further Information: The Battery Council International outlines state lead-acid battery laws at: <a href="http://www.batterycouncil.org/states.html">http://www.batterycouncil.org/states.html</a>. Publications: Stavins, Robert N.; Harvard University, John F. Kennedy School of Government Research Working Papers Series No. RWP00-004, Experience with Market-Based Environmental Policy Instruments, 2001. U.S. Environmental Protection Agency, EPA-240-R-01-001, The United States Experience with Economic Incentives for Protecting the Environment, 2001, available at: <a href="http://yosemite.epa.gov/ee/epa/eed.nsf/Webpages/SelectReports.html">http://yosemite.epa.gov/ee/epa/eed.nsf/Webpages/SelectReports.html</a>.

## **Conservation Pricing for Water Utilities**

There are a number of different types of full cost pricing used by utilities to encourage water conservation. Six of these pricing structures are described on the U.S. Environmental Protection Agency (EPA) Water and Wastewater Pricing Website. The U.S. EPA defines full cost pricing as "factoring all costs- past and future, operations, maintenance, and capital costs- into prices." The four types of pricing described on the EPA's Website as being most effective in encouraging conservation are increasing block rates, time of day pricing, water surcharges, and seasonal rates.

With increasing block rates, or tiered pricing, charges per unit of water are increased as the amount used increases. The first block is charged at one rate, the next at a higher rate, etc. Time of day pricing is a structure where higher prices are charged during a utility's peak demand periods. Water surcharges are increased rates imposed on water consumption that is considered higher than average. With seasonal rates, prices rise and fall according to water demands and weather conditions, with higher prices generally charged in the summer. Each of these types of pricing qualifies as full cost pricing as long as all costs are recovered through prices.

**Reference for Further Information:** See the U.S. EPA Water and Wastewater Pricing Website at <a href="http://www.epa.gov/water/infrastructure/pricing/index.htm">http://www.epa.gov/water/infrastructure/pricing/index.htm</a>.

#### **Development Rights Purchases**

**Description:** The term "Development Rights Purchases" means the purchase of the legal "right" of the owner to develop land for residential or commercial uses. When development rights are purchased for environmental protection purposes, existing land uses are generally maintained, but there are generally bans or limitations on new development. Development rights are often purchased by state and local governments and/or nonprofits groups. The U.S. Department of Agriculture New York Farm and Ranch Lands Protection Program provides matching funds for the purchase of development rights to keep productive farm and ranch land in agricultural uses.

Development Rights Purchases are like conservation easements, since both entail partial ownership via deed restrictions, contracts or covenants, as opposed to fee-simple transfer of ownership. However, development rights purchases often entail payments to land owners, contrasted to the preferential tax treatment of conservation easements. Buying development rights restricts development whereas conservation easements may require more land management such as soil conservation and plant maintenance to protect water quality and natural habitats. Partial ownership of land through deed restrictions, contracts and covenants is much less costly than outright ownership.

**Reference for Further Information:** U.S. Department of Agriculture Website: <a href="http://www.ny.nrcs.usda.gov/programs/programs/fpp.html">http://www.ny.nrcs.usda.gov/programs/programs/fpp.html</a>.

#### **Environmental Self Auditing**

**Description:** The term "environmental self auditing" refers to voluntary efforts by corporations and other organizations to comply with environmental regulations and improve their environmental performance. Environmental self auditing is carried out through detailed tracking and reporting on a wide range of environmental performance measures. These performance measures include number of Notices of Violations, total emissions, percent of energy usage per unit of output, number of self-identified environmental audit issues compared to the total number of such issues, percentage of issues resolved within established time frames, and percentage of personnel receiving environmental training. The U.S. Environmental Protection Agency's Audit Policy eliminates or reduces civil penalties for violations that facilities disclose, as the result of a documented self-audit procedure, and correct within 60 days.

**Reference for Further Information:** U.S. Environmental Protection Agency Website: <a href="http://www.epa.gov/region5/orc/audits/audit\_apil.htm">http://www.epa.gov/region5/orc/audits/audit\_apil.htm</a>.

Stafford, Sarah, "Does Self-Policing Help the Environment? EPA's Audit Policy and Hazardous Waste Compliance." *Vermont Journal of Environmental Law*, volume 6: 2004-2005, available at: <a href="http://www.vjel.org/articles/Stafford11FIN.htm">http://www.vjel.org/articles/Stafford11FIN.htm</a>. Also see that article's references section for additional sources and internet links.

## **Full Cost Environmental Accounting**

**Description:** Full cost environmental accounting is a management accounting method that takes into account all direct and indirect costs, including embedded environmental costs, of a product, process, or activity over its lifetime. The method uses three important concepts: full cost accounting, environmental cost accounting, and life cycle costing. Full cost accounting takes into account historical costs and current costs of the product, process, or activity. Environmental cost accounting brings in environmental costs, such as environmental pollution and habitat degradation, and ties them to the product, process, or activity. Finally, life cycle costing identifies the effects of the product, process, or activity at each life cycle stage (raw materials acquisition, manufacturing, use/reuse/maintenance, and recycling/waste management) and assigns those effects monetary values. This accounting method helps incorporate into decisions external costs that are not measured in more traditional accounting methods. Considering these costs is an important step in the pursuit of efficient management and environmental protection.

**Reference for Further Information:** Association of Chartered Certified Accountants Website: <a href="http://www.accaglobal.com/publications/accountingandbusiness/281399">http://www.accaglobal.com/publications/accountingandbusiness/281399</a>. Carnegie Mellon University Pdf files: <a href="http://www.ce.cmu.edu/GreenDesign/gd/education/FCA\_Module\_98.pdf">http://www.ce.cmu.edu/GreenDesign/gd/education/FCA\_Module\_98.pdf</a>, <a href="http://www.ce.cmu.edu/GreenDesign/gd/Research/fca.pdf">http://www.ce.cmu.edu/GreenDesign/gd/Research/fca.pdf</a>.

#### **Green Investments**

**Description:** Green investments are portfolios screened by managers to ensure that all capital is invested in companies, financial institutions, monetary funds, and/or other financial entities that have taken clear steps to minimize their environmental impact. The practices of these "environmentally responsible" financial entities may include, for example, use of renewable energy, energy conservation, reduction of solid waste through re-use and recycling, and/or providing products or services designed to help correct an environmental problem. Many managers of green investments require that all companies and institutions they invest in are in compliance with federal, state, and local environmental regulations. These investment portfolios are managed with profit in mind, but are tempered by environmental concerns. Green investments fall under the broader category of socially responsible investments.

**Reference for Further Information:** Social Investment Forum Website: <a href="http://www.socialinvest.org/">http://www.socialinvest.org/</a>. A directory of mutual funds categorized as "socially responsible" is available on Co-op America's National Green Pages Online at <a href="http://www.greenpages.org/">http://www.greenpages.org/</a>, choose search category "Financial-Mutual Fund Companies" on the drop down menu. For a hard copy of the National Green Pages, call Co-op America at 800-584-7336.

#### **Liability Assignment**

**Description:** Assignment of liability pertains to insurance markets where premiums reflect the relative degree of risk that activities pose to the environment. Premiums send price signals to insurance subscribers creating incentive (i.e., the possibility of lower insurance costs) to prevent pollution, thus reducing their liability. Liability is assigned through common law (negligence) or environmental statutes. The Resource Conservation and Recovery Act (RCRA) program includes a financial responsibility requirement under which disposers of hazardous substances must show they can handle the costs of corrective action. This encourages companies to buy insurance to cover the costs of potential damages and provides incentives to avoid releases of hazardous wastes into the environment. Liability standards are also a way to fund remediation activities, i.e., responsible parties are liable for cleanup costs under the Superfund program.

**Reference for Further Information:** See the U.S. Environmental Protection Agency Website at <a href="http://www.epa.gov/compliance/cleanup/superfund/liability.html">http://www.epa.gov/compliance/cleanup/superfund/liability.html</a> and <a href="http://www.epa.gov/compliance/cleanup/rcra/finance.html">http://www.epa.gov/compliance/cleanup/rcra/finance.html</a>.

## **Pollution Charges**

**Description:** Pollution charges are fees or taxes imposed on polluters based on the amount of pollution generated. These charges reduce market inefficiencies by discouraging pollution and accounting for the costs of pollution. While the U.S. does not use pollution charges extensively, these charges could be implemented by all levels of government throughout the U.S. Under the Colorado Pollution Prevention Act of 1992, the state levies chemical inventory fees on certain hazardous and extremely hazardous waste generators that exceed the threshold planning quantities under the Superfund Amendments and Reauthorization Act. Russia and Ukraine, and a number of nations in the European Union, including Germany and Great Britain, have considerable experience with pollution charges.

**Reference for Further Information:** The following reports are available at: <a href="http://yosemite.epa.gov/ee/epa/eed.nsf/Webpages/SelectReports.html">http://yosemite.epa.gov/ee/epa/eed.nsf/Webpages/SelectReports.html</a>.

U.S. Environmental Protection Agency (EPA) National Center for Environmental Economics, *The United States Experience with Economic Incentives for Protecting the Environment*, EPA-240-R-01-001, January 2001.

U.S. Environmental Protection Agency (EPA) National Center for Environmental Economics, *International Experiences with Economic Incentives for Protecting the Environment*, EPA-236-R-04-001, November 2004.

#### **Forest Banks**

**Description:** Forest Banks, such as the Nature Conservancy's Forest Bank, lease forest lands, manage those lands, and provide annual payments to the landowners. Landowners transfer to the Forest Bank the rights to grow, manage and harvest trees on their land. In exchange, the landowners receive guaranteed annual payments of interest-only on the "principal" (i.e., the assessed market value of the timber at time of deposit in the Bank), a right to withdraw principal revenue on demand, and a guarantee that the timber will remain as forest and will not be developed or clear cut. If the timber on Forest Bank land is harvested, it is done so carefully by the Bank's forester in accordance with a stewardship plan formulated with the landowner. The Forest Bank concept is aimed primarily at non-industrial private landowners.

**Reference for Further Information:** Dedrick, J.P.; Hall, T.E.; Hull, R.B.; and Johnson, J.E.; "The Forest Bank: An Experiment in Managing Fragmented Forests," *Journal of Forestry*, issue 98, volume 3, pp. 22-25: 2000. Also see the Nature Conservancy Website at <a href="http://www.nature.org/">http://www.nature.org/</a> and search on "forest bank" on the Website.

## **Transit Pass Subsidy Programs**

**Description:** The 1994 Federal Employees Clean Air Incentives Act (Public Law 103-172) provides for the establishment of federal programs to encourage employees to commute by means other than single-occupancy motor vehicles. The purpose of the law is to improve air quality and reduce traffic congestion. Under the Clean Air Incentives Act, the U.S. Environmental Protection Agency (EPA), the U.S. Department of Agriculture (USDA), and other federal government entities implement transit subsidy programs. At the U.S. EPA Headquarters in Washington, D.C., the transit subsidy is provided through a fare card voucher system in partnership with the Washington Area Mass Transit Authority (WAMTA). The fare card vouchers are issued in amounts up to \$105 per month for use by participating Agency employees. These vouchers are good for subway fares, bus fares, and any other type of approved public transportation that serves the Washington, D.C. metropolitan area.

**Reference for Further Information:** Library of Congress Thomas Website: <a href="http://thomas.loc.gov/bss/d103/d103laws.html">http://thomas.loc.gov/bss/d103/d103laws.html</a>, search on Public Law 103-172 (103<sup>rd</sup> Congress).

#### **Ecotourism**

**Description:** The International Ecotourism Society defines ecotourism as "responsible travel to natural areas that conserves the environment and improves the well-being of local people." It suggests that people implementing and participating in ecotourism follow these principles: minimizing environmental impact, building environmental and cultural awareness and respect, and providing direct financial benefits for conservation and for local people. In addition, ecotourism activities can advance the three goals of the Convention on Biological Diversity, which are: 1.) conserve biological and cultural diversity by strengthening protected area management systems, 2.) promote the sustainable use of biodiversity, by generating jobs and business opportunities in ecotourism and related business networks, and 3.) share the benefits of ecotourism developments equitably with local communities and indigenous peoples. If carefully targeted and properly implemented, ecotourism offers the real hope of protecting valuable ecosystems while producing a source of revenue for local communities.

**Reference for Further Information:** International Ecotourism Society Website: <a href="http://www.ecotourism.org/">http://www.ecotourism.org/</a>. United Nations Environment Programme Website: <a href="http://www.uneptie.org/pc/tourism/">http://www.uneptie.org/pc/tourism/</a>. Green Globe Sustainable Travel and Tourism Website: <a href="http://www.greenglobe.org/">http://www.greenglobe.org/</a>.

Conservation International Website: <a href="http://www.ecotour.org/xp/ecotour/">http://www.ecotour.org/xp/ecotour/</a>.

## **Energy Star Program**

**Description:** Energy Star is a joint program of the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Energy (DOE). The program helps businesses and individuals protect the environment and save money through improved energy efficiency. Energy Star offers tools and resources helping individuals and households to voluntarily plan and undertake projects that reduce their energy bills and improve home comfort. The program offers a proven energy management strategy for businesses that helps them to measure current energy efficiency, set goals for energy efficiency improvements, and track financial savings resulting from those improvements. In addition, the U.S. EPA recognizes appliances, computers, light bulbs, and entire buildings that meet high standards of energy efficiency with the Energy Star seal. The U.S. EPA has plans to continue to expand the Energy Star program, so that by 2012 it will prevent about 50 metric tons of carbon equivalent (MMTCE) of greenhouse gases from being emitted each year, equivalent to the emissions of over 30 million vehicles, and will reduce energy bills by about \$15 billion annually across the U.S.

References for Further Information: Energy Star Website: http://www.energystar.gov/.

## **Home Energy Efficiency Mortgages**

**Description:** Home energy efficiency mortgages are a loan category including any mortgage on a new or existing home for which the underwriting guidelines have been relaxed due to the home's energy efficiency features. Energy efficiency mortgages provide potential and existing homeowners with better than average interest rates and reduced down payments. To qualify for a home energy efficiency mortgage, the homeowner is often required to have his or her home rated by a professional energy rater certified under a national or state accredited home energy rated system (HERS). Both government insured (e.g. FHA, Veteran's Administration) and conventional (e.g. Fannie Mae, Freddie Mac) home energy efficiency mortgages are available. Home energy efficiency mortgages are used to finance technologies such as photovoltaics, solar water and space heating, and energy efficient appliances and systems. The U.S. Department of Energy estimates that an "energy efficient home" can lower home owners' utility bills by 10% to 50%.

**Reference for Further Information:** Residential Energy Services Network Website: <a href="http://www.natresnet.org/resources/lender/default.htm">http://www.natresnet.org/resources/lender/default.htm</a>. Energy Star Program Website: <a href="http://www.energystar.gov/">http://www.energystar.gov/</a>, information about HERS ratings under "New Homes." Database of State Incentives for Renewable Energy Website: <a href="http://www.dsireusa.org/">http://www.dsireusa.org/</a>, click on the "Federal Incentives" icon, then go to the "Federal Loan Program" category.

## Financial Incentives for Purchasing Hybrid and Alternative Fuel Vehicles

**Description:** There are many financial incentives available in the U.S. to assist people with purchasing alternative fuel, fuel cell, and hybrid electric vehicles. Some financial incentives offered by states include tax credits, tax deductions, and exemptions from parking fees. On the federal level, the Energy Policy Act of 2005 (EPACT) offers consumers and businesses tax credits beginning in January 2006 for the purchase of hybrid electric, alternative fuel, and fuel cell vehicles. The dollar amount of the federal tax credit for the purchase of hybrid electric vehicles varies, and is based on estimates of fuel economy. The federal tax credit for the purchase of fuel cell vehicles is \$8,000 until 2009, after which it will be \$4,000. The dollar amount of the federal tax credit for the purchase of alternative fuel vehicles is based upon the incremental cost of the vehicle.

**Reference for Further Information:** See <a href="http://www.hybridcars.com/incentives.html">http://www.eere.energy.gov/afdc/laws/incen\_laws.html</a> for listings of financial incentives for the purchase of hybrid electric, alternative fuel, and fuel cell vehicles. For information on fuel cell & alternative fuel vehicles, see: <a href="http://www.fueleconomy.gov/feg/fuelcell.shtml">http://www.fueleconomy.gov/feg/fuelcell.shtml</a>

# **Green Suppliers Network**

**Description:** The Green Suppliers Network is a collaborative venture among the U.S. Environmental Protection Agency, the U.S. Department of Commerce's Manufacturing Extension Partnership, and industries participating voluntarily. The Green Suppliers Network works with large manufacturers to engage their small and medium sized suppliers in inexpensive technical reviews focusing on process improvement and waste minimization. These reviews are coordinated through 360vu, a U.S. Department of Commerce program which is the national accounts arm of the Manufacturing Extension Partnership. Through the Green Suppliers Network, participating industries learn manufacturing techniques that help them to increase energy efficiency and optimize resource utilization. Thus, industries participating in the network often increase their profits and reduce their environmental impacts.

**Reference for Further Information:** Green Suppliers Network Website: <a href="http://www.greensuppliers.gov/gsn/home.gsn">http://www.greensuppliers.gov/gsn/home.gsn</a>. Website for 360vu: <a href="http://www.360vu.com/prod\_serv/index.html">http://www.360vu.com/prod\_serv/index.html</a>.

#### U.S. Environmental Protection Agency: Pollution Prevention (P2) Website

**Description:** The U.S. Environmental Protection Agency (EPA) Pollution Prevention (P2) Website has information about state, federal, and private resources and initiatives for pollution prevention, pollution prevention publications, and various approaches to achieving pollution prevention. Under Section 6602(b) of the Pollution Prevention Act of 1990 (Public Law 101-508), Congress established a national policy that pollution should be prevented or reduced at the source whenever feasible. The full text of the Act, and summarized information about it, can be found on the Website.

The federal pollution prevention initiatives described on the Website include programs of the U.S. EPA and other government entities, such as the EPA Pollution Prevention Grant Program, programs funded with government grants, and federal government partnerships with industry. The Website also has a directory, listed under "P2 Resources," of pollution prevention programs in all fifty U.S. States, the District of Columbia, Puerto Rico, and the Virgin Islands. In addition, there are many pollution prevention tips for small businesses, schools, and citizens described on the Website.

**Reference for Further Information:** U.S. Environmental Protection Agency Pollution Prevention (P2) Website: <a href="http://www.epa.gov/oppt/p2home/index.htm">http://www.epa.gov/oppt/p2home/index.htm</a>.

## U.S. Environmental Protection Agency: Natural Gas Star Program

**Description:** Natural Gas STAR is a U.S. Environmental Protection Agency (EPA) program consisting of voluntary partnerships that encourage companies across the natural gas and oil industries to adopt cost effective technologies and practices that improve operational efficiency and reduce emissions of methane. This program has many partners who develop a customized implementation plan summarizing how they intend to incorporate the Gas STAR Program into their operations. The U.S. EPA assists Natural Gas Star partners in drawing upon the wealth of partner-provided information, and presents its partners with many opportunities to learn about methane emissions reductions technologies and techniques.

Since the Program began in 1993, Natural Gas STAR partners have eliminated 338 billion cubic feet (Bcf) of methane emissions through the implementation of the Program's core Best Management Practices (BMPs), as well other activities identified by partner companies (referred to as Partner Reported Opportunities). This is the equivalent of removing more than 30 million cars from the road for one year. At the same time, these companies have saved over a \$1 billion by keeping more gas in their systems for sale in the market. As of 2004, the companies participating in Natural Gas STAR represent nearly 70% of the natural gas industry in the U.S.

References for Further Information: Natural Gas Star Website: <a href="http://www.epa.gov/gasstar/">http://www.epa.gov/gasstar/</a>.

### U.S. Environmental Protection Agency: Climate Leaders Partnership

**Description:** Climate Leaders is a voluntary industry-government partnership administered by the U.S. Environmental Protection Agency (EPA). The program works with participating companies, called Climate Leaders Partners, to develop long-term comprehensive strategies for reducing their emissions of greenhouse gases, believed to contribute to global climate change. The Partners use an accounting program that helps them to track their progress in reducing greenhouse gas emissions. Each Partner sets a corporate-wide greenhouse gas reduction goal and inventories their emissions to measure progress. By reporting inventory data to EPA, Partners create lasting records of their accomplishments. Through their participation, Partners identify themselves as corporate environmental leaders and strategically position themselves to stay competitive. The Partners also benefit by receiving technical assistance in the development of their greenhouse gas emissions inventories, and improving their understanding of their greenhouse gas emissions.

**Reference for Further Information:** U.S. EPA Climate Leaders Program Website: <a href="http://www.epa.gov/climateleaders/index.html">http://www.epa.gov/climateleaders/index.html</a>.

# U.S. Environmental Protection Agency: Green Power Partnership

**Description:** The Green Power Partnership is a voluntary Partnership between the U.S. Environmental Protection Agency (EPA) and organizations interested in buying green power. Through this partnership, EPA supports organizations that buy or plan to <u>buy green power</u>. Green power is a marketing term for electricity that is partially or entirely generated from environmentally preferable renewable energy sources, such as solar, wind, geothermal, biomass, biogas, and low-impact hydro. As a Green Power Partner, an organization pledges to replace a portion of its electricity consumption with green power within a year of joining the partnership. EPA offers credible benchmarks for green power purchases, market information, and opportunities for recognition and promotion of leading purchasers. The goal of the Green Power Partnership is to facilitate the growth of the green power market by decreasing the cost and increasing the value of green power. Due to economies of scale, increased green power generation capacity could lead to substantial cost savings across the board for people purchasing green power. A strong green power market will support new, clean technologies that will reduce the environmental impact of electricity generation.

**References for Further Information:** U.S. EPA Green Power Partnership Website: <a href="http://www.epa.gov/greenpower/aboutus.htm">http://www.epa.gov/greenpower/aboutus.htm</a>.

## U.S. Environmental Protection Agency: WasteWise Program

**Description:** WasteWise is a U.S. Environmental Protection Agency (EPA) program through which organizations save money by reducing the solid waste and industrial waste that they generate. The program provides free technical assistance to participating organizations, helping them to develop, implement, and measure their waste reduction activities, including recycling and waste prevention. WasteWise is flexible and voluntary, encouraging partners to design waste reduction programs tailored to their individual needs. Through their participation in the program, organizations benefit their bottom line by reducing their purchasing and waste disposal costs. Participating organizations are also assisted in expanding their waste reduction programs through the WasteWise Challenge, an initiative that helps partners to adopt the strategies proven most successful by other partners. In addition, WasteWise provides publicity for participating organizations that are successful in reducing waste, via EPA <u>publications</u>, case studies, and national and regional events.

**Reference for Further Information:** U.S. EPA WasteWise Website: <a href="http://www.epa.gov/wastewise">http://www.epa.gov/wastewise</a>.

# **U.S. Environmental Protection Agency: Pollution Prevention Grant Program**

**Description:** The Environmental Protection Agency (EPA) Pollution Prevention (P2) Grant Program awards grants to support the establishment and expansion of state pollution prevention programs pursuant to the Pollution Prevention Act of 1990 (Public Law 101-508). The purpose of the P2 Grant Program is to give state programs the capability to assist businesses and industries with identifying better environmental strategies for complying with state and federal environmental regulations. The P2 Grant Program is focused on demonstrating the value of making multimedia pollution prevention an environmental management priority. Eligible recipients include all U.S. states, the District of Columbia, all territories and possessions of the U.S., any agency or instrumentality of a U.S. state, including state universities, and all federally recognized tribes. The majority of P2 grants fund state-based projects. In most cases, grant recipients must contribute fifty percent of the total cost of their project in dollars or in-kind goods and services, but tribal matches can be as low as five percent, if the tribe has a Performance Partnership Grant in place.

**Reference for Further Information:** U.S. EPA Pollution Prevention Grant Program Website: <a href="http://www.epa.gov/oppt/p2home/grants/ppis/ppis.htm">http://www.epa.gov/oppt/p2home/grants/ppis/ppis.htm</a>. Information on these grants is also available in the *Catalog of Federal Domestic Assistance* at <a href="http://12.46.245.173/cfda/cfda.html">http://12.46.245.173/cfda/cfda.html</a>, search on program number 66.708.